

A NEW CURIMATID FISH  
(CHARACIFORMES: CURIMATIDAE)  
FROM THE AMAZON BASIN

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*Abstract.* — *Curimata fasciata* is described from several localities in the upper Rio Madeira system of the southwestern portion of the Amazon basin. The presence of irregular longitudinal stripes centered along the middle of the lateral and dorsal rows of body scales distinguishes the species from all other curimatids.

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The ichthyofauna of the upper portions of the eastern tributaries of the Rio Madeira in the Brazilian states of Rondônia and Mato Grosso is poorly known, with relatively sparse samples of the fishes of the region presently available. Recent collecting activities associated with the Projecto Aripuanã (see Arnaud and Cortez 1976 for an overview) and by researchers at the Museu Nacional, Rio de Janeiro have resulted in the first major collections of fishes from that portion of the Rio Madeira system. Included within that material was a distinctive undescribed species of curimatid characiform fish described herein.

Counts and measurements in the description follow the methods outlined in Vari (1982, 1984). Values in square brackets are those of the holotype. Specimens examined for this study are deposited in the following institutions: British Museum (Natural History), London, BMNH; Géry collection; Instituto Nacional de Pesquisas da Amazônia, Manaus, INPA; Museu Nacional, Rio de Janeiro, MNRJ; Museu de Zoologia da Universidade de São Paulo, MZUSP; and National Museum of Natural History, Smithsonian Institution, Washington, D.C., USNM.

*Curimata fasciata*, new species

Fig. 1

*Holotype.* — MNRJ 11208, 89.6 mm standard length (SL), collected by Gustavo W. Nunan, Decio F. Moraes, Jr., and Wagner D. Bandeira, in the Rio Romari (or São Domingo) near Nova União, Municipality of Ouro Preto do Oeste, Território de Rondônia, Brazil (10°53'17"S, 62°33'35"W); Nov 1983.

*Paratypes.* — 27 specimens. 8 specimens: USNM 270377, 4 specimens (1 cleared and counterstained for cartilage and bone), 72.3–92.3 mm SL; MNRJ 11,271, 4 specimens, 74.3–90.4 mm SL; collected with holotype. 5 specimens: USNM 270375, 2 specimens, 90.1–96.0 mm SL; INPA, 3 specimens, 64.0–86.8 mm SL; Rio Aripuanã, above cachoeira de Dardenelos, Mato Grosso, Brazil (approx. 10°19'42"S, 59°12'30"W). 8 specimens: USNM 270376, 2 specimens, 78.0–83.3 mm SL; INPA, 2 specimens, 77.8–79.1 mm SL; BMNH 1985.2.5:1–2, 2 specimens, 79.4–80.1 mm SL; MZUSP 28724, 2 specimens, 86.1–87.1 mm SL; Rio Aripuanã, approximately 10 km above cachoeira de Dardenelos, Cidade de Humboldt, Mato Grosso, Brazil. 6 specimens, Géry collection, 55.3–83.9 mm SL; Rio Aripuanã, above cachoeira do Andorinhas, Mato Grosso, Brazil.

*Diagnosis.* — The possession of a series of distinct irregular longitudinal stripes



Fig. 1. *Curimata fasciata*, holotype, MNRJ 11208, 89.6 mm SL; Rio Aripuanã, Mato Grosso, Brazil.

along the lateral and dorsal surfaces of the body wall distinguishes *Curimata fasciata* from all other curimatid species with the exception of *Curimatus multilineatus* (= *Curimata multilineata*). The latter species, described by Myers (1927: 109) from the upper portions of the Rio Negro basin, also has a pattern of dark longitudinal body stripes, but can nonetheless be readily separated from *C. fasciata* by the relative position of the pigment bands. In *Curimata fasciata* the stripes are formed by spots centered along the middle of the dorsal and lateral rows of body scales, whereas in *C. multilineata* the dark pigmentation lies along the point of overlap of vertically adjoining rows of horizontal scales. *Curimata fasciata* is also characterized by a dark band outlining the posterior portion of the lateral line and by a dark band along the middle rays of the caudal fin, pigmentation patterns lacking in *C. multilineata*. *Curimata multilineata*, in turn, has a horizontal stripe running from the tip of the snout to the orbit and from the rear of the orbit across the opercle, a band which is not present in *C. fasciata*.

*Description.*—Body moderately elongate, deeper in ripe females; compressed. Dorsal profile of head concave above snout, straight or very slightly concave above orbit. Dorsal profile of body smoothly curved from rear of head to origin of rayed dorsal fin; straight and posteroventrally slanted at base of dorsal fin, gently convex from base of last dorsal ray to caudal peduncle. Dorsal body surface with indistinct median keel immediately anterior to rayed dorsal fin, smoothly rounded transversely posterior to fin. Ventral profile of head nearly straight; ventral profile of body straight or gently concave to origin of pelvic fin, gently curved from that point to caudal peduncle. Prepelvic region indistinctly flattened, flattening more pronounced posteriorly, with obtuse angle in body wall proximate to pelvic fin origin. Prepelvic region with median series of 3 or 4 somewhat enlarged scales immediately anterior to pelvic fin origin. Indistinct median post-pelvic keel extending from slightly behind origin of pelvic fin posteriorly to anus. Secondary obtuse keel on each side of postventral portion of body about two scale rows dorsal of ventral midline.

Greatest body depth at origin of rayed dorsal fin, depth 0.36–0.42 [0.39]; snout tip to origin of rayed dorsal fin 0.47–0.52 [0.50]; snout tip to origin of anal fin 0.84–0.89 [0.86]; snout tip to origin of pelvic fin 0.53–0.58 [0.55]; snout tip to anus 0.79–0.84 [0.82]; origin of rayed dorsal fin to hypural joint 0.54–0.59 [0.56].

Rayed dorsal fin obtusely pointed, first branched fin ray longest, longest ray approximately 2.3–2.6 times length of ultimate ray. Pectoral fin pointed; length of pectoral fin 0.19–0.22 [0.20], extending approximately two-thirds of distance to origin of pelvic fin. Pelvic fin pointed, length of pelvic fin 0.23–0.25 [0.24], reaching three-quarters of distance to origin of anal fin. Caudal fin forked. Adipose dorsal fin well developed, unscaled. Anal fin emarginate, first branched ray longest, anteriormost branched rays approximately two and one-half times length of ultimate ray. Caudal peduncle depth 0.13–0.14 [0.13].

Head obtusely pointed in profile, head length 0.28–0.30 [0.28]; upper jaw longer, mouth inferior; snout length 0.29–0.32 [0.30]; nostrils very close, anterior circular, posterior crescent-shaped with aperture closed by thin flap of skin separating nares; orbital diameter 0.28–0.31 [0.30]; adipose eyelid moderately developed, with vertically ovoid opening over center of eye; length of postorbital portion of head 0.40–0.44 [0.43]; gape width 0.28–0.32 [0.31]; interorbital width 0.39–0.45 [0.43].

Pored lateral line scales from supracleithrum to hypural joint 32 to 37 [34]; all scales of lateral line pored, canals in scales straight; 4 or 5 series of scales extending beyond hypural joint onto caudal fin base; 5½ or 6½ [5½] scales in transverse series from origin of rayed dorsal fin to lateral line; 4½ or 5½ [4½] scales in transverse series from lateral line to origin of anal fin.

Dorsal-fin rays ii,9 or iii,9 (when three unbranched rays present, first very short) [ii,9]; anal-fin rays ii,7 or iii,7 (when three unbranched rays present, first very short) [iii,7]; pectoral-fin rays 14 to 16 [15]; pelvic-fin rays i,8 [i,8].

Total vertebrae 32 (4), 33 (20), 34 (1).

*Color in alcohol.* — Specimens lacking guanine in scales with overall tan ground coloration, darker on dorsal portions of head and body. Head with field of dark small chromatophores on upper lip, snout, interorbital and supraoccipital regions. Patch of dark pigmentation over sixth infraorbital (dermosphenotic) and above anterodorsal margin of opercle. Dorsal half of opercle with scattered small chromatophores, more so in larger specimens.

Distinct spots of pigmentation centered at junction of scales along middle of dorsal and lateral rows of body scales. Individual spots of scale rows form irregular longitudinal stripes of differing degrees of intensity. Longitudinal stripe on third scale row ventral of lateral line with pigmentation poorly developed on anterior and posterior portions, particularly in smaller individuals. Spots of first and second scale rows ventral of lateral line diminishing in size posteriorly, not reaching to hypural joint and ventral margin of caudal peduncle respectively. Spots of lateral line scales well developed, outlining lateral line canals; spots contiguous on posterior half of body, forming continuous line. Spots of scale series dorsal of lateral line well developed, forming irregularly continuous horizontal stripes. Spots merging into overall darker chromatophore field present on dorsal portion of body, particularly approximate to middorsal region of body between rayed and adipose dorsal fins, and along dorsal surface of caudal peduncle. Longitudinal series of spots somewhat masked in specimens retaining guanine in scales. Overall coloration of specimens retaining guanine silvery, but with spots of pigmentation on scales readily apparent.

Irregular field of dark scattered chromatophores on midlateral surface of caudal peduncle. Chromatophore field extending anteriorly one or two scales anterior of

hypural joint and continuing posteriorly to limit of scales on base of caudal fin; peduncle pigmentation continuous posteriorly with horizontal band of middle rays of caudal fin.

Rayed dorsal fin with series of small chromatophores along anterior margin of fin and on distal portion of rays, giving distal half of fin a dusky appearance. Obscure spot of pigmentation sometimes present between third and fifth branched rays near their bases; spot more apparent in smaller individuals. Caudal fin rays outlined by series of chromatophores. Median rays of caudal fin with distinctly dusky to black band of pigmentation continuous with dark stripe along lateral line. Adipose dorsal and pelvic fins dusky. Pectoral fin with chromatophore series along margins of dorsalmost fin rays.

*Distribution.*—*Curimata fasciata* is known from the upper portions of the eastern drainages of the Rio Madeira system.

*Relationships.*—Although *Curimata fasciata* has a pigmentation pattern seemingly very similar to that of *C. multilineata* Myers, the two species are not each other's closest relatives. As noted in the "Diagnosis" the longitudinal stripes of the two forms differ in position and are apparently non-homologous. The relationships of *C. fasciata* lie rather with a group of species including *C. elegans* Steindachner (1874), *C. metae* Eigenmann (1922) and *C. robustula* Allen (in Eigenmann and Allen 1942) which share with *C. fasciata* a series of derived characters including an elaborate pattern of papillose lobes in the roof of the mouth, dark pigmentation outlining the terminal portion of the lateral line, and an obscure midlateral spot on the caudal peduncle.

*Remarks.*—A variety of very different classificatory schemes have been utilized within the family Curimatidae. The number of recognized genera under different systems has fluctuated from seven (Eigenmann 1910) to 29 (Fernández-Yépez 1948). Research completed (Vari 1982, 1984) or in progress attempts to redefine subunits of the family along natural lines, and has or will result in the synonymization of numerous genera and the redefinition of recognized taxa. Pending completion of those studies, the species described herein is retained in the broadly encompassing genus *Curimata* which has included the bulk of the species of the family in the more widely utilized classificatory schemes.

*Etymology.*—*fasciata*, the specific epithet from the Latin for striped, is in reference to the longitudinal body stripes of the species.

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Note added in proof.—Since this paper went to press, the four paratypes originally in the Géry collection have been deposited in the Muséum d'Histoire Naturelle, Geneva (MNHG 2226.24).